

# NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

## FACT SHEET

(pursuant to NAC 445A.236)

**Permittee Name:** Clark County Department of Parks and Community Services  
4325 Stephanie Street  
Las Vegas, Nevada 89122  
for the

**Location:** Silver Bowl Sports Complex Park  
6800 East Russell Road  
Las Vegas, Nevada - Clark County

Latitude: 36 05' 30"N; Longitude: 115 01' 30"W  
Section 35, T.21 South, R.65 East MDB&M

**Permit Number:** NEV2004533

**General:** The Silver Bowl Sports Complex Park proposes to receive tertiary treated disinfected effluent for reuse irrigation supplied by the Clark County Water Reclamation Facility (CCWRF #NV0021261). The reclaimed water will be used for spray irrigation of the 66 acres of turf grasses, and for drip irrigation of trees. The park irrigation system has been retrofitted for reuse effluent irrigation. All potable hose bibs have been removed and capped to prevent any public contact.

**Receiving Water Characteristics:** Groundwater in the vicinity of the course is approximately 12 feet below ground surface with groundwater flow direction to the north-northeast toward Duck Creek. Shallow aquifer water quality in the area is poor historically, with the averages for TDS of 5,000 mg/L and above, and with chlorides and sulfate above drinking water standards. Two monitoring wells, one up gradient and one down gradient will be required to be installed, as the effluent is only partially denitrified with an average of 15 mg/l as Total Nitrogen.

**Description of the Location of the Discharge:** The Silver Bowl Park complex has large areas of turf grass used primarily as soccer playing fields and other similar recreational uses. The park also has four baseball diamonds. The area irrigation system has been entirely retrofitted for effluent reuse. Limited potable water is available for drinking water fountains and restroom facilities. The potable water is provided by a separate newly installed supply system. Cross connection and backflow prevention issues have been thoroughly addressed. The park complex is located at 6800 East Russell Road, southwest of the Silver Bowl Stadium, in Las Vegas, Clark County, Nevada. The Clark County Water Reclamation Facility will supply the treated effluent for irrigation via the park irrigation systems.

**Flow:** The permitted 30-day ave. flow is 0.438 MGD, which is the maximum anticipated amount for the hot summer months. The annual average usage will be approximately 0.13 MGD per month, due to lower usage in the cooler months. Flows are measured at the onsite reclaimed meter vault.

**Procedures for Public Comment:** The Notice of the Division's intent to issue a permit

authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit is being sent to the **Las Vegas Review-Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a 30 day period following the date of the public notice, by June 20, 2005. the comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period, and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

**Discharge Limitations:** As noted in Table I.1 below, the CCWRF will be providing the sports complex with Tertiary treated, partially denitrified, disinfected reclaim water to the park complex. The Fecal Coliform requirement is set at 2.2 CFU or MPN/100 ml, 30-day average. Therefore, in accordance with NAC 445A.277, a buffer zone and control of public access are not required.

**TABLE I.1: Discharge Limitations**

<u>PARAMETERS</u>	<u>EFFLUENT DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	30 Day Ave.	Daily Max.	Measurement Frequency	Sample Type
Flow:	0.438 MGD	M & R MGD	Continuous	Flow meter
Fecal Coliform:	2.2 CFU or MPN/100 ml	23 CFU or MPN/100 ml	Weekly	Discrete
Total Nitrogen as N: <sup>(1)</sup>	Monitor and Report mg/L		Monthly	Calculate
Total Kjeldahl Nitrogen as N:	Monitor and Report mg/L		Monthly	Composite
Total Oxidized Nitrogen as N: (Nitrate + Nitrite)	Monitor and Report mg/L		Monthly	Composite
Ammonia as N:	Monitor and Report mg/L		Monthly	Composite
Total Nitrogen lbs/ac/year:	220 lbs/ac/year (turf grass) See Part I.B.4.		4th Quarter	Calculate

(1) Total Nitrogen as N can be reported as the sum of Total Oxidized Nitrogen and Total Kjeldahl Nitrogen

CFU = Colony Forming Unit; MPN = Most Probable Number

Monitoring requirements may be satisfied by data collected by the Clark County Water Reclamation Facility. Discharge Monitoring Reports are to be submitted by the Permittee. Copies of backup data or water quality calculation summaries are to be maintained by the Permittee.

**Groundwater Monitoring:** MW-1, MW-2

GROUNDWATER ELEVATION	Monitor & Report	Monthly	Discrete
STATIC WATER LEVEL	Monitor & Report	Monthly	Discrete
TOTAL DISSOLVED SOLIDS:	Monitor & Report mg/L	Monthly	Discrete
TOTAL NITROGEN - N:	Monitor & Report mg/L	Monthly	Discrete
NITRATE - N:	Limits per Part I.A.6.	Monthly	Discrete

**Schedule of Compliance:** The Permittee shall implement and comply with the provisions of the following schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the Schedule of Compliance.

a. The Permittee shall achieve compliance with the discharge limitations upon issuance of the permit;

b. The Permittee shall not reuse treated effluent prior to having an approved EMP per NAC 445A.275;

c. Two groundwater monitoring wells, an upgradient and a downgradient well, shall be installed within 90 days of permit issuance. Design plans shall be signed and stamped by a Nevada Registered Professional Engineer, along with plans showing the proposed locations of the monitoring wells shall be submitted to the Division for review and approval within 15 days of permit issuance.

d. Any compliance deliverables shall be submitted to Mr. Nadir Sous, NDEP-LV, 1771 East Flamingo Road, Suite 121-A, Las Vegas, Nevada 89119. A copy shall also be submitted to Ms. Diana Silsby, Compliance Coordinator, NDEP, 901 South Stewart Street, Carson City 89701.

**Rationale for Permit Requirements:** Reclaimed water monitoring is required to assess the level of treatment being provided by the CCWRF, to assess the management of recycled water usage, and to protect the local groundwater quality. Fecal Coliform and nitrogen species are required for monitoring the quality of reclaim water being applied, and for protection of human health and the environment. Groundwater monitoring is required to ensure that effluent irrigation is not impacting the groundwater.

**Determination:** The Division has made the determination to issue the proposed permit for a five-year(5) period.